8.1.2 Average Energy Intensity of Public Water Supplies by Location (kWh per Million Gallons)

Location	Sourcing		Treatment (1)	Distribution	Wastewater	Total
United States (2)	836		627	437	1,363	3,263
United States (3)	2,230		65	(6)	1,649	2,295
Northern California Indoor	2,117		111	1,272	1,911	5,411
Northern California Outdoor	2,117		111	1,272	0	3,500
Southern California Indoor	9,727	(5)	111	1,272	1,911	13,021
Southern California Outdoor	9,727		111	1,272	0	11,110
Iowa	2390		(6)	380	1,570	4,340
Massachusetts	1,500		(6)	(6)	1,750	3,250
Wisconsin Class AB (4)	–		–	–	not included	1,510
Wisconsin Class C (4)	–		–	–	not included	1,850
Wisconsin Class D (4)	–		–	–	not included	1,890
Wisconsin Total (4)	–		–	–	not included	1,601

Note(s): 1) Treatment before delivery to customer. 2) Source: Electric Policy Research Institute (EPRI) 2009. Wastewater estimated based on EPRI 2002. 3) Source: TIAX 2006. 4) Based on water treatment facility size: Class AB >4000 customers, Class C: 1000 to 4000, Class D <1000. Median energy use value reported. 5) Southern California sourcing energy is high because of energy used to pump water from Northern California. 6) Included with Sourcing.

Source(s): Electric Power Research Institute, Program on Technology Innovation: Electric Efficiency Through Water Supply Technologies A Roadmap, Publication 1019360, 2009; EPRI, Water & Sustainability (Volume 4): U.S. Electricity Consumption for Water Supply & Treatment – The Next Half Century, 2002; DOE/TIAX LLC, Commercial and Residential Sector Miscellaneous Electricity Consumption: Y2005 and Projections to 2030, 2006; California Energy Commission/Navigant Consulting, Refining Estimates of Water Related Energy Use in California, Public Interest Energy Research Program, CEC-500-2006-118; Iowa Association of Municipal Utilities/Iowa Energy Center, Energy Consumption and Costs to Treat Water and Wastewater in Iowa Part II: Survey Results Tables and Charts, 2002; EPA, Ensuring a Sustainable Future: An Energy Management Guidebook for Wastewater and Water Utilities, 2008; and Energy Center of Wisconsin, Energy Use at Wisconsin's Drinking Water Utilities, 2003.